



A space-time analysis of *Mycoplasma bovis* in Denmark

Arede, Margarida; Nielsen, Per Kantsø; Ahmed, Syed Sayeem Uddin; Halasa, Tariq; Nielsen, Liza Rosenbaum; Toft, Nils

Publication date:
2015

Document version
Early version, also known as pre-print

Citation for published version (APA):
Arede, M., Nielsen, P. K., Ahmed, S. S. U., Halasa, T., Nielsen, L. R., & Toft, N. (2015). *A space-time analysis of Mycoplasma bovis in Denmark*. Poster session presented at Annual Meeting of the Society of Veterinary Epidemiology and Preventive medicine, Ghent, Belgium.

A space-time analysis of *Mycoplasma bovis* in Denmark

Margarida Arede¹, Per K. Nielsen¹, Syed S.U. Ahmed¹, Tariq Halasa¹, Liza R. Nielsen², Nils Toft¹

¹ Section for Epidemiology, National Veterinary Institute, Technical University of Denmark

² Department of Large Animal Sciences, Faculty of Health and Medical Sciences, University of Copenhagen

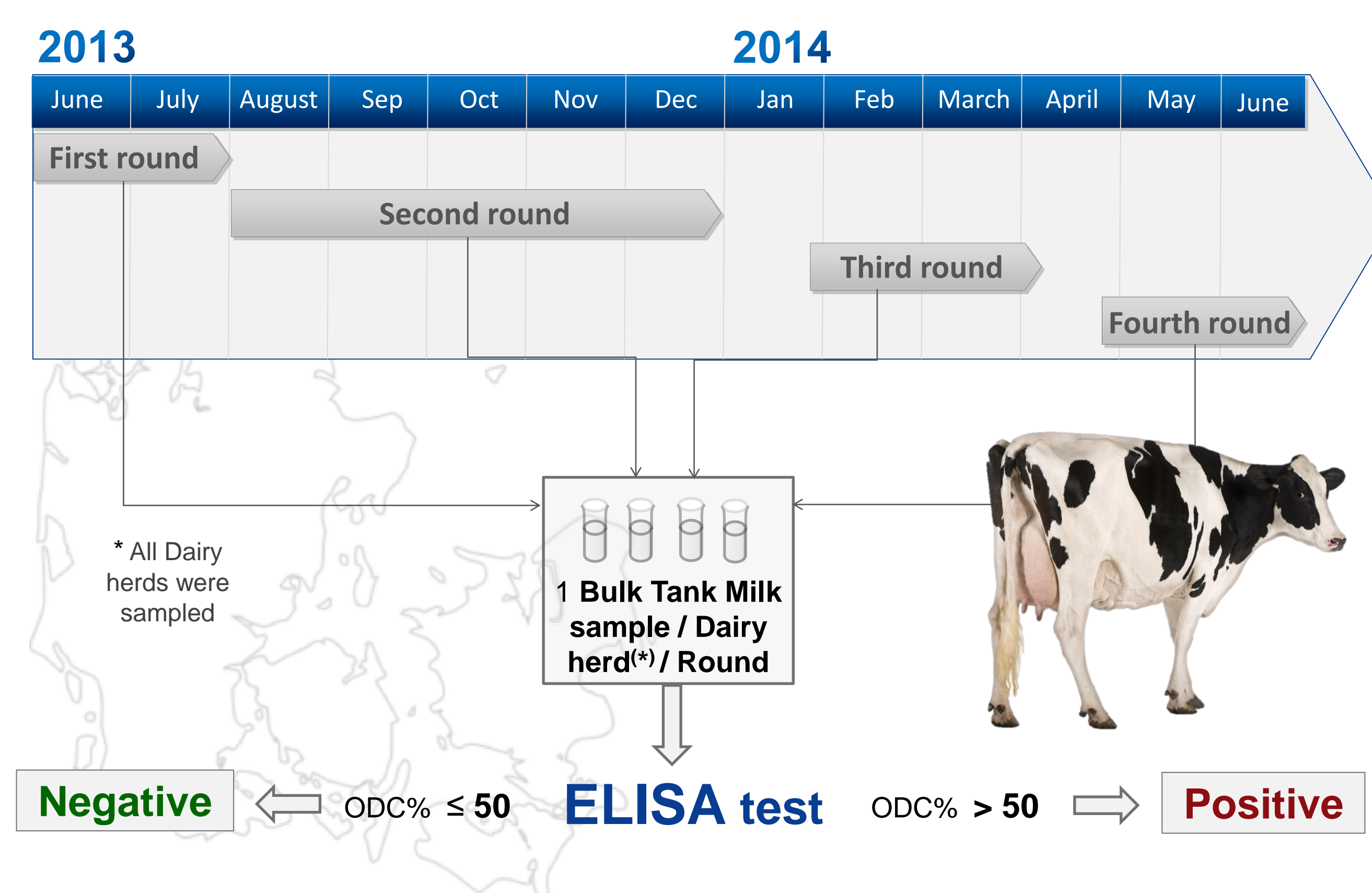
Background

Mycoplasma (M.) bovis causes in cattle, among other diseases, mastitis. The dairy cattle population in Denmark had an increase in atypical clinical outbreaks of *M. bovis* over the past years. An important prerequisite to the implementation of an effective control program is to **determine the geographical distribution of *M. bovis*.**

Conclusions

- *Mycoplasma bovis* infected herds are clustered in northern or southern Denmark.

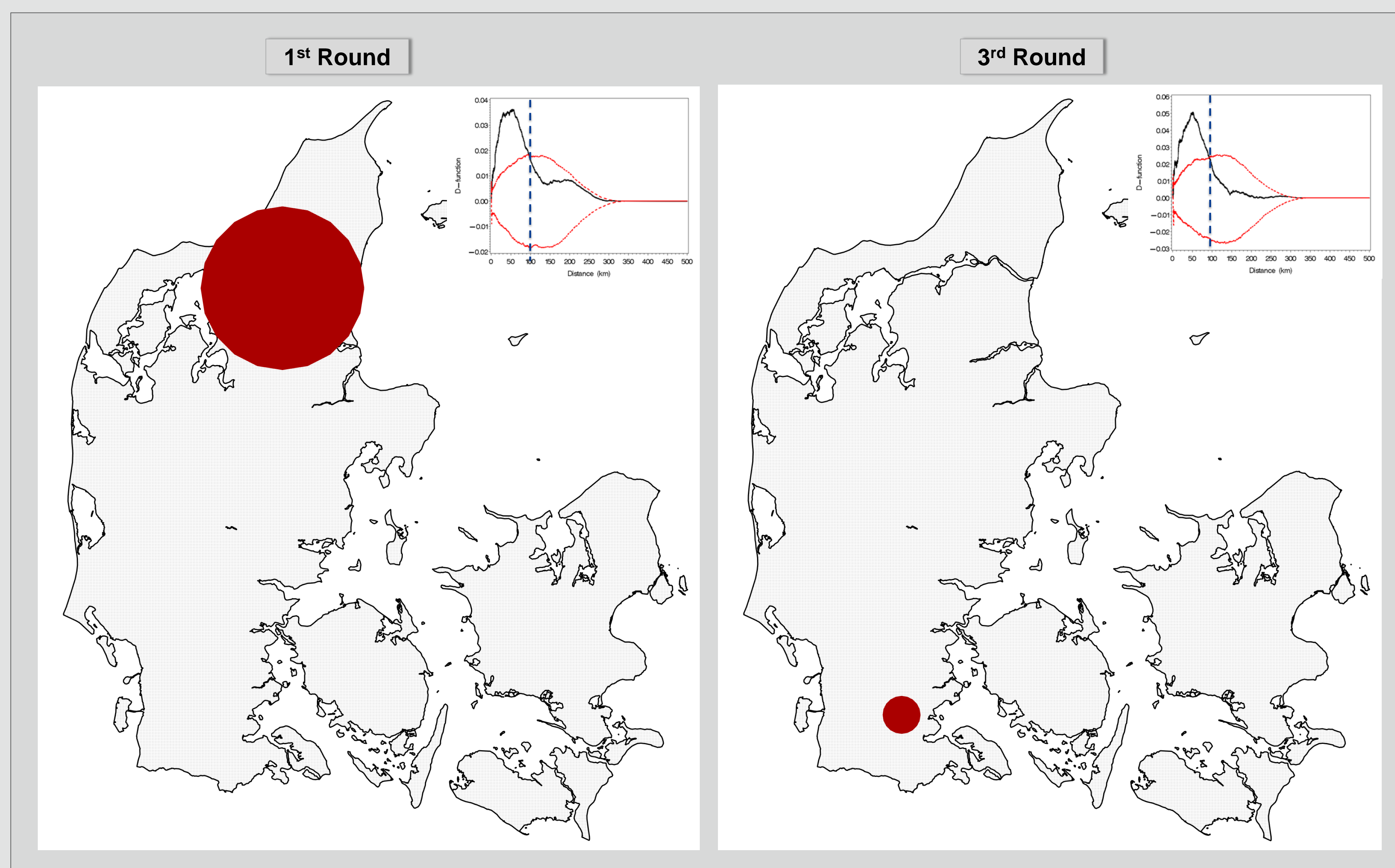
Data



Results

Space-time scan statistics (SatScan™) / K- function

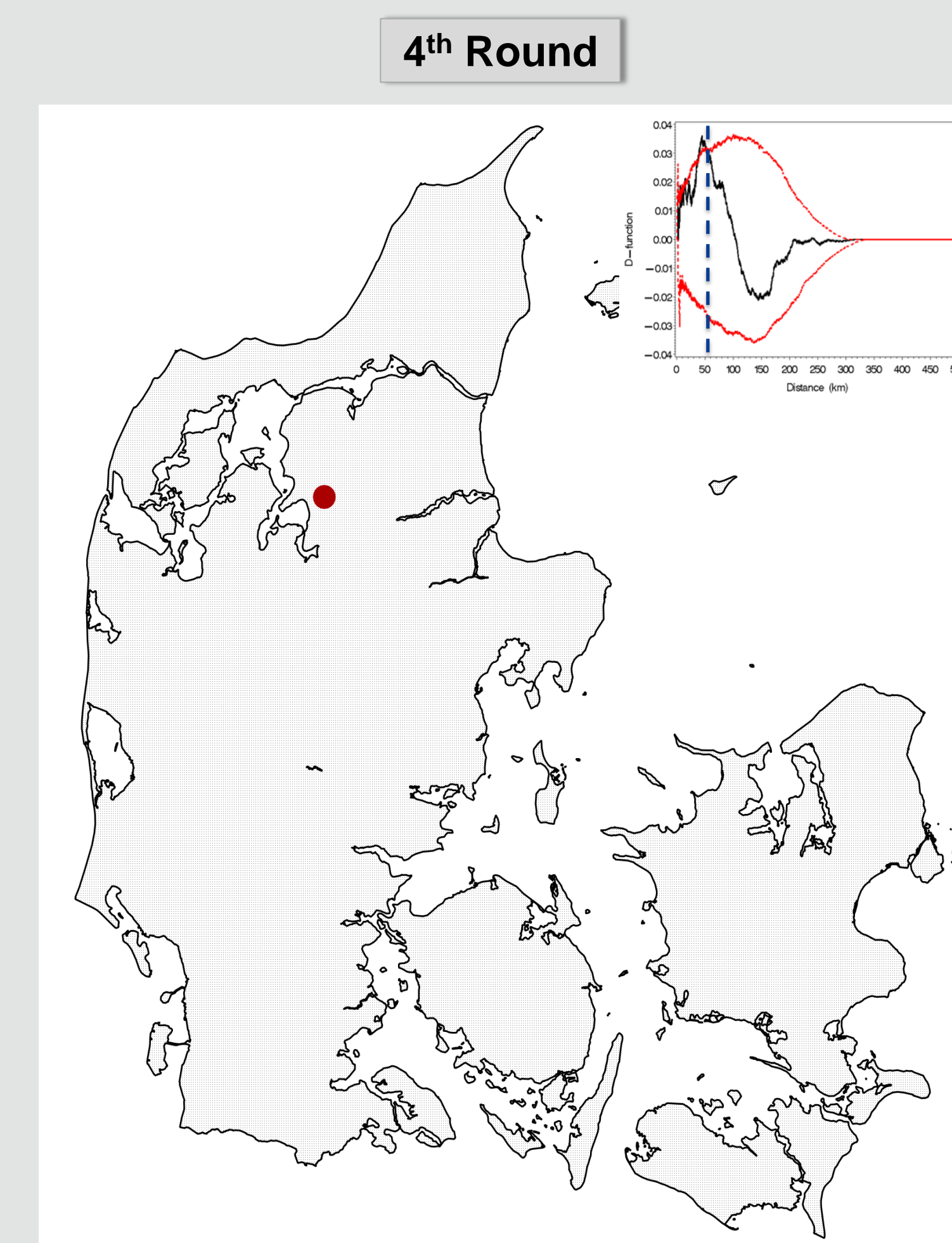
Significant local primary clusters*



The maps show the location of the clusters of *M. bovis* infected herds, while the inserts (K-function) indicate global clustering of cases around a radius of 70 km (app), in each round.

(*)There was no clustering in the second round.

A marginally significant primary cluster:



The clusters are in areas with high herd and cattle density.

Acknowledgements:

- Danish Milk Levy fund who funded the sampling
- SEGES who provided the data

